

Mid- Atlantic DER Workshop Philadelphia, PA

PJM Demand Response Programs

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- 2001–2002 Program Highlights
 - 2002 Program Activities
 - Fundamental Differences/Issues
 - Future Goals
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2001–2002 Program Highlights

- Summer 2001 pilot program contained two separate pieces:
 - Emergency option
 - Economic option
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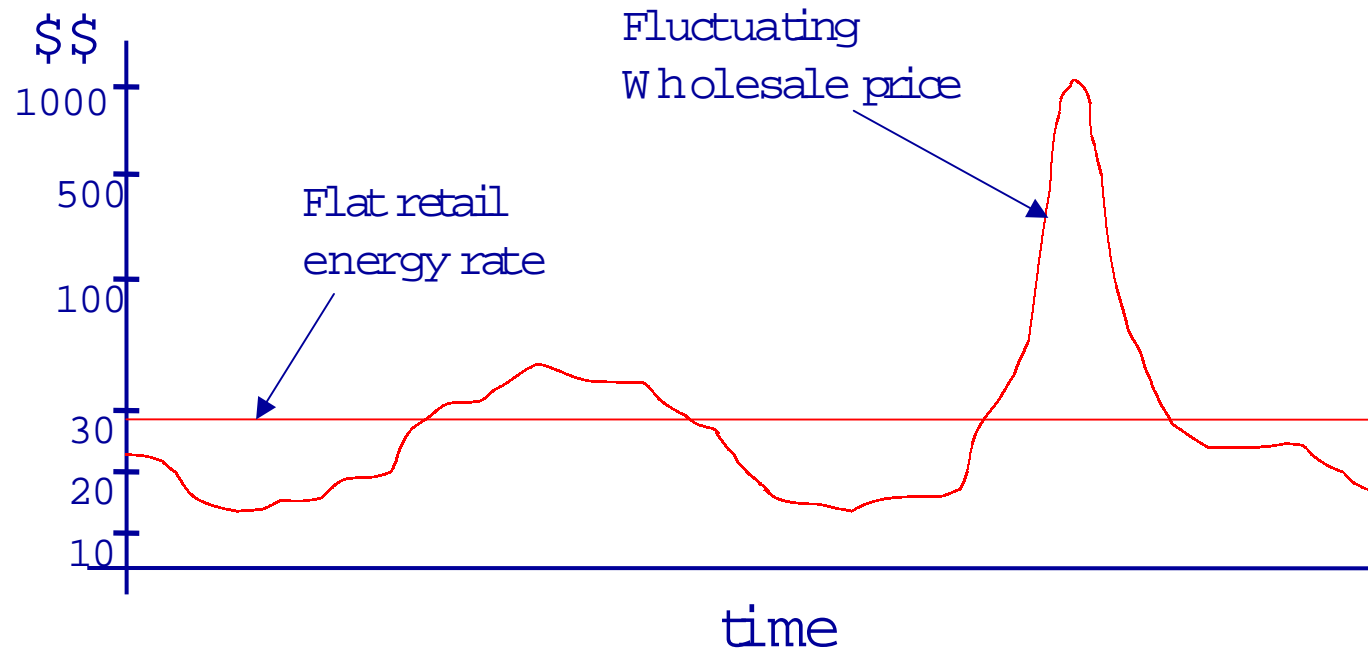
2001-2002 Emergency Option

- Participation required PJM membership – non-PJM Members could:
 - apply for special membership in PJM or
 - participate through another member
 - Those customers already participating in ALM program with energy supplier or distribution company are NOT eligible while ALM is in effect.
 - PJM paid higher of Zonal LMP or \$500/MWh for metered reductions
 - Charges allocated in the same manner as emergency purchases
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2001-2002 Economic Option

- Customer's LSE charged LMP for reductions
- LSE credited customer's retail rate
- Difference credited to the party that signed the load reduction up with PJM





2001-2002 Economic Option

- Requirements:
 - must be a full PJM member to participate
 - customers must be able to meter reductions on an hourly basis
 - ALM customers may participate when ALM obligations are not active
- As a result:
 - customer decides when to reduce based on their own economic factors
 - no notification from PJM
 - no floor price
 - no costs to "socialize" because settlement is a zero-sum calculation

- Total participation: 220 MW
 - 150 M W Emergency
 - 70 MW Economic
 - 164 M W also in ALM programs
- 50 Customer sites
 - 21 Companies
 - 11 submitting entities
- Actual Load Response Events
 - Emergency: July 25th, August 8th and 9th
 - Additional economic responses on August 7th and 10th

- July 25th event: 18 sites responded for approximately 22M W
 - August 8th event: 29 sites responded for approximately 20M W
 - August 9th event: 30 sites responded for approximately 63M W
 - All reductions are in addition to those counted under the existing ALM program.
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- Demand-Side Response Task Force (DSRTF) created by the PJM Members Committee
 - DSRTF charge was to determine principles by which a demand side program should operate
 - These principles were approved by the MC on October 4, 2001
 - Demand-Side Response Working Group was then formed under the Energy Market Committee to design a program according to those principles
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Fundamental Differences/Issues

- Payment to load reducers
 - Full LMP
 - LMP minus the customer's retail rate
- Collection of program costs
 - Charge to LSE
 - Allocate to load
- Minimum LMP for participation – \$30 or \$100
- Program length – 2 or 3 years
- Average days for CBL calculation



2002-2003 Emergency Program

- Emergency program close to 2001-2002 program
 - Maintains Special membership
 - Maintains floor price
 - Allocates costs same as emergency
 - Permanent program reviewed yearly by Market Monitor
 - Less restrictions on ALM parties
- 25 MW non-interval meter customer program

***Emergency program approved by PJM
Members Committee February 14, 2002***



2002 – 2003 Economic Proposals

- Multiple Proposals for an Economic Program
- All proposals include Real Time and Day Ahead options

PJM Demand Side Response Working Group Still Trying to Reach Consensus on the Issues

- Long Term Goal: Develop a fungible, tradable demand response product
 - Short Term Goal: Develop a solution where certain elements, like subsidies and allocation of costs, may be necessary
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- The desired end state is for price signals to be sufficient motivators for demand response
 - Any economic program would be an interim step toward the end state
 - Such an interim step may need to include a subsidy to spur demand response
 - The interim step should only be applicable for the short-term, until the long-term solution can be developed and implemented
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Questions????
